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ABSTRACT

This study examined the internal factor structure of the Adolescent Individuation Measure (AIM), a 12-item index of adolescents' perceptions of connectedness and separateness with their parents. The AIM was administered to 3 independent samples totaling 378 undergraduate students, all white, middle-class, male and female from a small, private midwestern university; all subjects completed parallel forms of the AIM, one targeting the mother-adolescent relationship, and one targeting the father-adolescent relationship. A principal components factor analysis was conducted of each sample. Results suggested that those items designed to assess connectedness were successful from a cohesive, internally consistent dimension. The intended individuality items proved less successful than the connectedness items. A copy of the AIM is included. (MM)

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A Factor Analytic Examination of the Adolescent Individuation Measure

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Abstract

The Adolescent Individuation Measure (AIM; O'Brien, DeSantis, and Santilli, 1988), a 12-item index of adolescents' perceptions of connectedness and separateness with mother and father was examined with regard to its factor structure across three independent samples of male and female college students (n_1 = 139; n_2 = 148; and n_3 = 91; N_t = 378). Employing principal components factor analysis with each sample, the scree tests revealed two factors that were subsequently rotated to an oblique solution. Of the 12 items, all six of the connectedness items loaded significantly on one and only one factor for all three samples. Of the six separateness items, only four loaded significantly on one and only one factor for all three samples. The remaining two separateness items loaded inconsistently across all samples.

A Factor Analytic Examination of the Adolescent Individuation Measure

The purpose of the present study is to examine the internal factor structure of the **Adolescent Individuation Measure** (AIM; O'Brien, DeSantis, & Santilli, 1988; DeSantis, O'Brien, & Santilli, 1989). The construct of individuation has been receiving considerable attention in the adolescence literature (Cooper, Grotevant & Condon, 1983; Grotevant & Cooper, 1986; Smollar & Youniss, 1989). Most of these effort have defined individuation within a family systems theory context, characterizing individuation as a quality of relationships between adolescents and parents, rather than a personality trait possessed by any one individual.

For our purposes, we chose Grotevant and Cooper's (1986), model of individuation as a guide in the development of the **AIM**. From their perspective, individuation is a conceptualized as a blend of connectedness and individuality. These two qualities of parent-adolescent relationships are revealed through the day-to-day verbal interchanges between family members. Specifically, connectedness is expressed by: (a)

mutuality, a respect for the viewpoint of others; and (b) responsiveness, an openness to the ideas and views of others. Comparatively, individuality is demonstrated through: (a) self-assertion, the expression of one' own point of view to others; and (b) separateness, the fortitude to express opinions different from those of significant others.

Research by Grotevant and Cooper (1986), and others, most notably Cooper and Ayers-Lopez (1985), Smollar and Youniss (1989), and White, Speisman, and Costos (1983), have provided general support for individuation as a process beginning in early adolescence and extending right through young adulthood. In sum, it seems that the individuation process is crucial to the overall psychosocial development of the adolescent and young adult. Consequently, it seems apparent that the development of an efficient measure of individuation would be fruitful.

Method

Subjects and procedure: Three independent samples of white, middle-class, male and female college undergraduates (n_1 = 139, n_2 = 148, and n_3 = 91; N_T =

378), from a small, private midwestern university were administered the **AIM**. The scale is comprised of 12 items which employ a 6-point (strongly disagree-----strongly agree) Likert-type response format. Half of the items were designed to assess connectedness, while the remaining were designed to assess individuality (See Table 1). O'Brien, DeSantis, and Santilli (1988)

Insert Table 1 about here

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reported that independent judges familiar with the connectedness and individuality constructs rated the items as representative of individuation as defined by Grotevant and Cooper (1986). All subjects completed parallel forms of the **AIM**, one targeting the mother-adolescent relationship, and one targeting the father-adolescent relationship. **NOTE:** FOR CLARITY IN THE ANALYSES WE REFERRED TO INDIVIDUALITY AS SEPARATENESS IN THE TABLES AND ON THE SAMPLE SCALE OF THE **AIM**.

Results

Tables 2 through 5 display the factor structure, proportion of variance accounted for by each factor,

Cronbach's Alpha, and average inter-item correlations for the three samples independently and combined. Combining

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Insert Tables 2-5 about here

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the samples for a final analysis was justified by calculating Cattell's salient similarity index, S (Tabachnick & Fidell, 1989). This index determines the degree of similarity between factor structures of independent samples. In other words, does the factor structure observed in one sample replicate in a second sample? The obtained S statistics for a all possible combinations of factor comparisons ranged from .86 to 1.0, and are well above the criteria established by Cattell.

Employing principal components analysis across all four analyses, the scree tests revealed two factors that were subsequently rotated to an oblique solution. Of the 12 items, all six connectedness items loaded significantly (+ or - .40 and above) on one and only one factor, for both the mother and father forms of the **AIM**, across all analyses with one exception: Item CON2,

Father, Sample 3.

The factor patterns for the individuality items (labeled SEP) were less consistent. Of the six individuality items only three (SEP 1, 2, & 3) consistently loaded across all four analyses for both the mother and father forms of the **AIM**. The remaining three individuality items (SEP 4, 5, & 6) showed more inconsistent patterns: SEP4 loaded as expected on both forms in samples 1 & 2, and for mother in sample 3 and the combined analysis. SEP5 and SEP6 were even less consistent, occasionally loading as expected, loading on the connectedness dimension, or not loading at all.

Conclusions

These findings suggest that the **AIM** has an internal structure that matches the theoretical work outlined by Grotevant and Cooper (1986). Specifically, those items designed to assess connectedness did indeed from a cohesive, internally consistent dimension. Less success was achieved with the intended individuality items, with only four of the six items loading somewhat consistently across analyses.

Future directions for the development of the **AIM**

should include a reformulation of the troublesome individuality items in order to form a more stable factor structure paralleling the successfulness of the connectedness items. In addition, future sampling should include adolescents from younger age groups and underrepresented populations to determine the effectiveness of the AIM with these groups. Finally, convergent and discriminant validity estimates should be pursued to further extend the usefulness of this instrument.

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TABLE 1

ADOLESCENT INDIVIDUATION MEASURE (AIM)

THINK ABOUT THE TIME YOU SPEND WITH YOUR MOTHER (FATHER). BELOW EACH STATEMENT CIRCLE THE NUMBER WHICH INDICATES HOW WELL THAT STATEMENT DESCRIBES YOUR RELATIONSHIP WHEN YOU ARE WITH HER (HIM).

CON1: MY MOTHER (FATHER) AND I SHARE OUR THOUGHTS AND IDEAS WITH EACH OTHER.

NEVER 1—2—3—4—5—6 ALWAYS

CON2: WHEN I TELL MY MOTHER (FATHER) TO GIVE ME SPACE, SHE (HE) DOES.

NEVER 1—2—3—4—5—6 ALWAYS

CON3: MY MOTHER (FATHER) IS WILLING TO LISTEN TO WHAT I HAVE TO SAY.

NEVER 1—2—3—4—5—6 ALWAYS

CON4: MY MOTHER (FATHER) TRIES TO UNDERSTAND ME.

NEVER 1—2—3—4—5—6 ALWAYS

CON5: I RESPECT WHAT MY MOTHER (FATHER) HAS TO SAY.

NEVER 1—2—3—4—5—6 ALWAYS

CON6: EVEN THOUGH MY MOTHER (FATHER) DISAGREES WITH ME, SHE (HE) RESPECTS MY RIGHT TO MY OWN OPINION.

NEVER 1—2—3—4—5—6 ALWAYS

SEP1: I CAN MAKE MY OWN DECISIONS ABOUT THINGS THAT AFFECT ME.

NEVER 1—2—3—4—5—6 ALWAYS

SEP2: I DON'T FEEL I HAVE TO TALK WITH MY MOTHER (FATHER) BEFORE I MAKE AN IMPORTANT DECISION.

NEVER 1—2—3—4—5—6 ALWAYS

SEP3: I LIKE TO BE RESPONSIBLE FOR MYSELF, RATHER THAN DEPEND ON MY MOTHER (FATHER).

NEVER 1—2—3—4—5—6 ALWAYS

SEP4: I ENJOY BEING ABLE TO DO THINGS WITHOUT MY MOTHER (FATHER).

NEVER 1—2—3—4—5—6 ALWAYS

SEP5: MY MOTHER (FATHER) KNOWS THAT I HAVE IDEAS AND OPINIONS THAT ARE DIFFERENT FROM HERS (HIS).

NEVER 1—2—3—4—5—6 ALWAYS

SEP6: MY MOTHER (FATHER) EXPECTS ME TO TAKE RESPONSIBILITY FOR MY ACTIONS.

NEVER 1—2—3—4—5—6 ALWAYS

TABLE 2

SAMPLE 1 (n = 139): **FACTOR STRUCTURE, PROPORTION OF VARIANCE, CRONBACH'S ALPHA, AND INTER-ITEM CORRELATIONS**

	FACTORS	
	I	II
MOTHER		
CON1	.64	
CON2		.72
CON3	.79	
CON4	.86	
CON5	.74	
CON6	.76	
SEP1		.69
SEP2		.71
SEP3		.81
SEP4		.70
SEP5		.42
SEP6	.47	
$\%S^2$	34.0 %	19.8 %
ALPHA	.85	.71
r_{ii}	.48	.29
FATHER		
CON1	.79	
CON2	.69	
CON3	.86	
CON4	.87	
CON5	.80	
CON6	.81	
SEP1		.56
SEP2		.74
SEP3		.79
SEP4		.45
SEP5	.71	
SEP6	.54	
$\%S^2$	41.2 %	14.1 %
ALPHA	.90	.61
r_{ii}	.60	.21

TABLE 3

SAMPLE 2 (n = 148): **FACTOR STRUCTURE, PROPORTION OF VARIANCE, CRONBACH'S ALPHA, AND INTER-ITEM CORRELATIONS**

	FACTORS	
	I	II
MOTHER		
CON1	.72	
CON2	.73	
CON3	.83	
CON4	.80	
CON5	.72	
CON6	.82	
SEP1		
SEP2		.64
SEP3		.73
SEP4		.68
SEP5		.41
SEP6		
$\%S^2$	32.1%	16.6%
ALPHA	.87	.56
r_{ii}	.52	.17
FATHER		
CON1	.79	
CON2	.71	
CON3	.78	
CON4	.88	
CON5	.78	
CON6	.86	
SEP1		
SEP2		.66
SEP3		.65
SEP4		.75
SEP5		.47
SEP6	.68	
	.40	
$\%S^2$	39.0%	16.7%
ALPHA	.89	.61
r_{ii}	.58	.21

TABLE 4

SAMPLE 3 (n = 91): **FACTOR STRUCTURE, PROPORTION OF VARIANCE, CRONBACH'S ALPHA, AND INTER-ITEM CORRELATIONS**

	FACTORS	
	I	II
MOTHER		
CON1	.71	
CON2	.58	
CON3	.87	
CON4	.90	
CON5	.77	
CON6	.88	
SEP1		.72
SEP2		.75
SEP3		.72
SEP4		.54
SEP5	.54	
SEP6		.44
$\%S^2$	36.3%	19.0%
ALPHA	.89	.69
r_{ii}	.57	.27
FATHER		
CON1	.72	
CON2	.55	.48
CON3	.89	
CON4	.90	
CON5	.87	
CON6	.85	
SEP1		.77
SEP2		.48
SEP3		.78
SEP4		
SEP5	.74	
SEP6	.43	
$\%S^2$	41.2%	15.0%
ALPHA	.90	.50
r_{ii}	.60	.14

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TABLE 5

SAMPLES COMBINED (N = 378): **FACTOR STRUCTURE, PROPORTION OF VARIANCE, CRONBACH'S ALPHA, AND INTER-ITEM CORRELATIONS**

	FACTORS	
	I	II
MOTHER		
CON1	.70	
CON2	.70	
CON3	.83	
CON4	.84	
CON5	.74	
CON6	.82	
SEP1		.67
SEP2		.71
SEP3		.76
SEP4		.57
SEP5	.42	
SEP6		
$\%S^2$	33.2%	18.4%
ALPHA	.87	.66
r_{ii}	.52	.24
FATHER		
CON1	.78	
CON2	.66	
CON3	.85	
CON4	.89	
CON5	.80	
CON6	.84	
SEP1		.64
SEP2		.67
SEP3		.78
SEP4		
SEP5	.69	
SEP6	.45	
$\%S^2$	39.8%	15.0%
ALPHA	.90	.59
r_{ii}	.59	.19